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(54) SYSTEM AND METHOD FOR APPLYING TIME-DITHERING TO TUNING INPUT OF DIGITAL CONTROLLED OSCILLATOR

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a technology to apply time-dithering to a tuning input to an all digitally-controlled oscillator.

SOLUTION: The technology applying time-dithering to a tuning input of an all digitally controlled escillator DCO utilizes a shift register 1306 and a multiplexer 1308 that minimizes a spurious tone generated by a DCO(Digitally Controlled Oscillator) in response to sigma-delta modulation delay control. The shift register 1306 receiving a high frequency reference resulting from dividing an output signal from the DCO 200 is clocked. The multiplexer 1308 is clocked with a frequency reference synchronously with the output signal of the DCO 200 that is re-clocked. Thus, an output of the DCO 200 that is re-clocked. Thus, an output of the nultiplexer 1308 is subjected to time-dithering in response to delay control so as to minimize perpetuation caused by switching.

